Annual Report of Operations for Year 2020

To comply with NPDES General Permit No. WAG130000 for Federal Aquaculture Facilities and Aquaculture Facilities Located in Indian Country within the Boundaries of the State of Washington

NPDES # for your Facility:
WAG130026

Facility & Owner Information

Facility Name: Saltwater Park Sockeye Hatchery	
Operator Name (Permittee): Tacoma Power	
Address: 21462 N. Hwy 101 Shelton, WA 98584	
Email: aollenburg@cityoftacoma.org	Phone: 253-441-4950
Owner Name (if different from operator):	
Email:	Phone:

Best Management Practices (BMP) Plan

Has the BMP Plan been reviewed this year? ✔ Yes No

Does the BMP Plan fulfill the requirements of the General Permit? ✔ Yes No

Summarize any changes to the BMP Plan since the last annual report. Attach additional pages if necessary.

Operations and Production

Total harvestable weight produced in the past calendar year in pounds (lbs): 10,205.1

Pounds of food fed to fish during the maximum month: 1,308.6

List the species grown or held at your facility and the annual production of each in gross harvestable weight. If fish were released rather than harvested, list the weight at time of release.

Species	Fish Produced	Receiving Water(s) to which Fish were Released	Month Released/ Spawned
Sockeye Salmon	2,923	Lake Cushman	April
Sockeye Salmon	481.9	Lake Cushman	May
Sockeye Salmon	3,922.9	North Fork Skokomish River	May
Sockeye Salmon	3,177.4	Lake Cushman	October

Fill in the table below with production numbers from the past year. List the **maximum** amount of fish on-site and the maximum amount of food fed **per month**.

Month	Total Fish (lbs)	Fish Feed (lbs)	Month	Total Fish (lbs)	Fish Feed (lbs)
January	4,248.3	793.5	July	2,673.3	716.9
February	5,115.6	748	August	3,156.1	651.2
March	5,955.3	975.5	September	4,853.5	1,155.7
April	5,097.3	1,308.6	October	1,351	261.3
May	4,922	594.1	November	1,550.1	258.2
June	1,845.7	504.6	December	1,902.4	351.9

Additional Comments:

Solid Waste Disposal

Describe the solid waste disposed of during the calendar year (including fish mortalities).

Type of Solid Disposed	Date Disposed	Location Disposed
Fish mortalities	On-going	Mason County Landfill
Additional Comments:		

Fish Mortalities

Include a description and the dates of mass mortalities in the past year (more than 5% per week). Attach additional pages, if necessary. Include total mortalities from all causes.

Date	Cause of Deaths	Steps Taken to Correct Problem	Pounds of Fish
Additional Comments: No mass fish mortality events in 2020.			

Noncompliance Summary

Include a description and the dates of noncompliance events (including spills), the reasons for the incidents, and the steps taken to correct the problems. Attach additional pages, if necessary.

Inspections & Repairs for Production & Wastewater Treatment Systems

Date Inspected	Date Repaired	Description of System Inspected and/or Repaired
weekly	no repairs	Wastewater conveyance system/settling basins

Aquaculture Drugs and Chemicals

Please indicate whether you used each drug/chemical **during the past calendar year.**
Describe the use of each drug/chemical in more detail on the following pages.

Used in the past year?	Drug or Chemical
Yes ✔ No	Azithromycin
Yes ✔ No	Chloramine-T: ***See additional reporting requirements on page 7***
Yes ✔ No	Chlorine
Yes ✔ No	Draxxin
Yes ✔ No	Erythromycin - injectable
Yes ✔ No	Erythromycin - medicated feed
Yes ✔ No	Florfenicol (Aquaflor)
✔ Yes No	Formalin - 37% formaldehyde: ***See additional reporting requirements on page 7***
Yes ✔ No	Herbicide - describe:
Yes ✔ No	Hormone - describe:
Yes ✔ No	Hydrogen Peroxide: ***See additional reporting requirements on page 7***
✔ Yes No	Iodine: ***See additional reporting requirements on page 7***
Yes ✔ No	Oxytetracycline
Yes ✔ No	Potassium Permanganate: ***See additional reporting requirements on page 7***
Yes ✔ No	Romet
Yes ✔ No	SLICE (emamectin benzoate)
✔ Yes No	Sodium Chloride - salt
Yes ✔ No	Vibrio vaccine
Yes No	Other:
Yes No	Other:

Aquaculture Drugs and Chemicals (cont'd)

Describe all drug and/or chemical treatments that occurred during the year. Fill out the information below for each drug or chemical, plus page 7 for water-borne treatments. Attach additional pages as necessary.

Brand Name: Parasite S		Generic Name:	
Reason for use: Fungal control on eggs and live fish			
✔ Preventative/Prophylactic As-needed	Total quantity of formulated product per treatment (specify units):	Total quantity of formulated product used in past year (specify units): 75 gallons	
Date(s) of treatment: July 7 through December 16			Total number of treatments in past year:
Maximum daily volume of treated water:	Treatment concentration (specify units):	Duration and frequency of treatment(s): 60 min for static, 15 min for flow through	
Method of application:	✔ Static Bath ✔ Flow-through	Medicated Feed Other (describe):	
Location in facility chemical was used (check all that apply):	✔ Raceways ✔ Incubation building	Ponds Off-line settling basin	Other (describe):
Where did water treated with this chemical go? (check all that apply):	Discharged w/o treatment ✔ Settling basin	Septic System Publicly owned treatment works	Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use: Treatments occurred on Mondays, Wednesdays, and Fridays			

Brand Name:		Generic Name:	
Reason for use:			
Preventative/Prophylactic As-needed	Total quantity of formulated product per treatment:	Total quantity of formulated product used in past year (specify units):	
Date(s) of treatment:			Total number of treatments in past year:
Maximum daily volume of treated water:	Treatment concentration (specify units):	Duration and frequency of treatment(s):	
Method of application:	Static Bath Flow-through	Medicated Feed Other (describe):	
Location in facility chemical was used (check all that apply):	Raceways Incubation building	Ponds Off-line settling basin	Other (describe):
Where did water treated with this chemical go? (check all that apply):	Discharged w/o treatment Settling basin	Septic System Publicly owned treatment works	Other (describe):
Provide any additional information about how this chemical was used and/or special pollution prevention practices during use:			

Aquaculture Drugs and Chemicals (cont'd)

Additional Reporting Requirements for Water-Borne Treatments

- If a water-borne treatment was used during the calendar year, Permittees must include detailed records/calculations as an attachment to this Annual Report in order to demonstrate how the maximum effluent concentrations of solution and active ingredient were calculated for each chemical.
- EPA recognizes that water-borne treatments may vary in the volume of the vessels treated, concentration, quantity of product, etc. Permittees must provide the information listed in the following tables for a reasonable worst case (i.e., maximum effluent concentration) scenario, not for each individual treatment.
- Permittees must submit this information and calculate the maximum effluent concentration for each water-borne chemical used during the past calendar year.
- See also Appendix D for the Chemical Log Sheet.

Static Bath Treatments		
Tank Volume	36,000	Liters
Desired Static Bath Treatment Concentration	167,000	µg/L
Volume of Product Needed	5.5	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 16.7 ppm Active Ingredient: 16.7 ppm	Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	3,564,000 gpd (2,475 gpm)	Specify Units
Maximum % of Facility Discharge Treated	9.9	% of Total Discharge

Flow-Through Treatments		
Tank Volume	6.95	Liters
Calculated Flow Rate	1.9	Liters/Minute
Duration of Treatment	15	Minutes
Desired Flow-Through Treatment Concentration of Product	167,000	µg/L
Amount of Product to Add Initially	0	Liters Product
Amount of Product to Add During Treatment	5	mL/Minute
Total Volume of Product Needed	.076	Liters Product
Maximum Effluent Concentration of: 1) Solution and 2) Active Ingredient	Solution: 0.04 ppm Active Ingredient: 0.04 ppm	Specify Units
Minimum Volume of Total (treated + untreated) Water Discharged from the Facility per day	3,564,000 gpd (2,475 gpm)	Specify Units
Maximum % of Facility Discharge Treated	.04%	% of Total Discharge

Changes to the Facility or Operations

Describe any changes to the facility or operations since the last annual report.
Held adult sockeye for eggtake and treated them 3x's per week with a formalin bath. Incubated green salmon eggs and treated them 3x's per week with a flow through treatment.

Signature and Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly evaluate and gather the information submitted. Based on my inquiry of the person or persons, who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Keith Underwood	Natural Resources Manager
Printed name of person signing	Title
Keith Underwood Digitally signed by Keith Underwood Date: 2021.01.20 11:52:21 -08'00'	01.20.2021
Applicant Signature	Date Signed

Submittal Information

Send the complete, signed information, along with any attachments, to the following address:

U.S. EPA Region 10, OWW-191

Washington Hatchery Annual Report

1200 Sixth Avenue, Suite 900

Seattle, WA 98101-3140

Chemical Log Sheet (for water-borne treatments)

Facility Name: Saltwater Park Sockeye Hatchery **NPDES Permit Number: WAG130026**

Date	Raceway Treated	Chemical Name	Active Ingredient	Amount Applied	Units	Duration of Treatment	Treatment Type	Flow Treated (CFS)	Total Effluent Flow (CFS)	Effluent Concentration (ppb)	Person Reporting
7/17/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
7/20/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
7/22/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
7/24/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
7/27/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
7/29/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
7/31/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/3/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/5/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/7/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/10/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/12/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/14/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/17/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/19/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/21/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/24/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/26/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/28/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
8/31/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/2/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/4/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/7/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/9/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/11/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/14/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/16/2020	AT 3	Formalin	formaldehyde	5.5	liters	60 minutes	static bath	NA	5.5	16,700	AO

9/18/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/21/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/23/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/25/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/28/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
9/30/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/2/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/5/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/7/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/9/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/12/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/14/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/16/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/19/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/21/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/23/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/26/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/28/2020	AT3, AT4	Formalin	formaldehyde	11	liters	60 minutes	static bath	NA	5.5	16,700	AO
10/16/2020	ST1	Formalin	formaldehyde	0.076	liters	15 minutes	flow through	NA	5.5	40	AO
10/19/2020	ST1	Formalin	formaldehyde	0.076	liters	15 minutes	flow through	NA	5.5	40	AO
10/21/2020	ST1	Formalin	formaldehyde	0.076	liters	15 minutes	flow through	NA	5.5	40	AO
10/23/2020	ST1, ST2	Formalin	formaldehyde	0.152	liters	15 minutes	flow through	NA	5.5	40	AO
10/26/2020	ST1, ST2	Formalin	formaldehyde	0.152	liters	15 minutes	flow through	NA	5.5	40	AO
10/28/2020	ST1, ST2	Formalin	formaldehyde	0.152	liters	15 minutes	flow through	NA	5.5	40	AO
10/30/2020	ST1, ST2, ST3	Formalin	formaldehyde	0.228	liters	15 minutes	flow through	NA	5.5	40	AO
11/2/2020	ST1, ST2, ST3	Formalin	formaldehyde	0.228	liters	15 minutes	flow through	NA	5.5	40	AO
11/4/2020	ST1, ST2, ST3	Formalin	formaldehyde	0.456	liters	15 minutes	flow through	NA	5.5	40	AO
11/6/2020	ST1, ST2, ST3	Formalin	formaldehyde	1.228	liters	15 minutes	flow through	NA	5.5	40	AO
11/9/2020	ST1, ST2, ST3	Formalin	formaldehyde	0.684	liters	15 minutes	flow through	NA	5.5	40	AO
11/11/2020	ST1, ST2, ST3	Formalin	formaldehyde	2.228	liters	15 minutes	flow through	NA	5.5	40	AO

11/13/2020	ST1, ST2, ST3	Formalin	formaldehyde	1.368	liters	15 minutes	flow through	NA	5.5	40	AO
11/16/2020	ST1, ST2, ST3	Formalin	formaldehyde	3.228	liters	15 minutes	flow through	NA	5.5	40	AO
11/18/2020	ST1, ST2, ST3	Formalin	formaldehyde	2.052	liters	15 minutes	flow through	NA	5.5	40	AO
11/20/2020	ST1, ST2, ST3	Formalin	formaldehyde	4.228	liters	15 minutes	flow through	NA	5.5	40	AO
11/23/2020	ST1, ST2, ST3	Formalin	formaldehyde	4.104	liters	15 minutes	flow through	NA	5.5	40	AO
11/25/2020	ST1, ST2, ST3	Formalin	formaldehyde	5.228	liters	15 minutes	flow through	NA	5.5	40	AO
11/27/2020	ST1, ST2, ST3	Formalin	formaldehyde	6.156	liters	15 minutes	flow through	NA	5.5	40	AO
11/30/2020	ST1, ST2, ST3	Formalin	formaldehyde	6.228	liters	15 minutes	flow through	NA	5.5	40	AO
12/2/2020	ST1, ST2, ST3	Formalin	formaldehyde	12.312	liters	15 minutes	flow through	NA	5.5	40	AO
12/4/2020	ST1, ST2, ST3	Formalin	formaldehyde	7.228	liters	15 minutes	flow through	NA	5.5	40	AO
12/7/2020	ST1, ST2, ST3	Formalin	formaldehyde	18.468	liters	15 minutes	flow through	NA	5.5	40	AO
12/9/2020	ST1, ST2, ST3	Formalin	formaldehyde	8.228	liters	15 minutes	flow through	NA	5.5	40	AO
12/11/2020	ST1, ST2, ST3	Formalin	formaldehyde	36.936	liters	15 minutes	flow through	NA	5.5	40	AO
12/14/2020	ST2, ST3	Formalin	formaldehyde	0.152	liters	15 minutes	flow through	NA	5.5	40	AO
12/16/2020	ST3	Formalin	formaldehyde	0.076	liters	15 minutes	flow through	NA	5.5	40	AO